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Wholesale Prices and Wholesale Price Indices

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Wholesale prices and wholesale price indices

I. Introduction

1. For the development of national accounting and the diversification of economic analysis, it is becoming increasingly necessary for indices of price movements to be calculated at various stages in the marketing process on the basis of well defined groups of products. Thus, many countries construct a comprehensive index or partial indices which are intended to measure variations in the tempo of the prices of representative products at the "wholesale trade" stage of distribution.

2. Such indices are called wholesale price indices because the point of observation is wholesale trade. However, in practice, the prices used may be the prices which large manufacturers or producers ask from wholesalers, the prices which wholesalers charge retailers, the prices paid by importers to producers, etc. In other words, the prices used are those charged at some point in the circuit other than the point of retail sale. Very few countries have indices which pertain exclusively to wholesale transactions. This may be because in the case of many local products, sales are made directly by the producer to the retailer.

3. Moreover, there is a need for many more statistics pertaining to the prices charged in transactions carried out at the time products enter the economic circuit (i.e. on sales made by domestic producers and on purchases made by importers) and at the time they reach the final consumer (sales of capital goods, retail sales and exports) and for statistics pertaining to the use of intermediate goods by producers. In many countries the statistics authorities feel that with such price series it is possible to determine price movements at the various stages of wholesale and retail distribution.

4. This document pertains to the problems involved in and the methods used in collecting the data for wholesale price series. It deals primarily with the definition and description of wholesale prices, the usefulness of statistics, the selection of articles, choosing respondents, methods of data collection and wholesale price indexes.

II. Definition and description of wholesale prices

Definition

5. As we have just seen, wholesale prices are in theory prices which relate to wholesale transactions. Thus, they are the prices charged in the distribution process, i.e., they include commercial services and are thus distinguished from production costs or retail prices as defined in the documents dealing with the subjects.

6. Therefore, to define the concept of wholesale prices amounts to defining the kind of activity involved in wholesale trade. The distribution sector through which merchandise passes from the producer to the consumer is made up of two main mechanisms: wholesale trade and retail trade. Wholesale trade is that stage in the distribution process which is the closest to production. It is defined as being the re-sale (sale without transportation) of new or used goods to retailers; to industrial, commercial, institutional or professional users. The principal types of business included are merchant wholesalers, i.e., wholesalers who take title to the goods they sell, such as wholesale merchants or small wholesale traders who purchase goods from producers or import merchandise which they later sell to other merchants in large or medium consignments, jobbers, industrial distributors, exporters, importers, co-operative buying associations; sales branches and sales offices maintained by manufacturing or mining enterprises apart from their plants or mines for the purposes of marketing their products; merchandise and commodity brokers, commission merchants and agents; petroleum bulk stations and assemblers, buyers and co-operative associations engaged in the marketing of farm products.1/

B. Description

7. Thus, the term "wholesale prices" means the prices charged in large-scale wholesale transactions as defined above. In general, there are the unit prices actually charged by wholesalers. Many countries are trying to collect data on the prices at which transactions are actually made since these prices are important and useful to them.

8. Thus, wholesale prices are calculated after deducting the discounts, reductions and other mark downs on current prices unless such discounts, reductions and mark downs are allowed because of the volume of the goods purchased or for reasons relating to the time of payment However, wholesale prices include the value of goods returned and exchanged if those goods are part of the transaction.

9. Moreover, the prices must in theory include indirect contributions (sales taxes, fees, duties) levied and delivery, installation and financing charges when and charges are for services rendered by the wholesaler. However, there is considerable variation in the way in which different countries considering turnover taxes, sales taxes, indirect taxes and other taxes and subsidies related to goods in sales price series. The solution adopted seems to depend on the way in which such taxes and subsidies are treated in statistics relating to sales or production value. It would be advisable to have two price series, one relating to prices without taxes and the other to prices with all taxes included, the former being of interest mainly to producers and the second to buyers.

10. Catalogue prices are used as a last resort when, for example, the products in question have not been traded recently or when it is not yet possible to determine the price of the product sold. When prices are set by the State, these are the prices which are usually taken into consideration.

11. As pointed out in the introduction in the case of some products, prices may in practice be observed at different stages: sales price of goods produced, import price and export price. In the case of export prices, it will be preferable to deal with the prices of products which are about to cross the border.

1/ International Recommendations on Statistics of the Distributive Trades and Services.

III. Usefulness of statistic on wholesale prices

12. Wholesale price indices are one of the oldest forms of statistical information compiled. Actually, the greatest economic expectations have been based on the observation of series of wholesale price indices which are used as short-term indicators and make it possible to keep track of the pattern of economic activity. The most advanced countries attach special importance to the use of such indices for purposes of economic analysis. For one thing, some partial wholesale price indices are sensitive to fluctuations in world prices, especially where primary commodities are concerned. Moreover, it is generally easier to obtain statistics on the wholesale prices charged on markets. It should be noted that products entering wholesale markets have usually been more carefully selected and processed than goods sold by producers to the first buyer.

13. Since wholesale trade represents that stage in the distribution process which is the closest to production, wholesale price indices are also designed to reflect production costs in the various sectors of the economy.

IV. Criteria for and methods of selecting articles

14. The list of products or articles whose prices might be indexed is so long that only a small number of them can be selected for inclusion in a price survey. The following steps must be taken in selecting representative transactions:

(i) Choice of products and articles to be included in price surveys;
(ii) Choice of varieties of each product or article selected.

15. One criterion whose application to the selection of articles is not open to question is the criterion of the importance of articles as shown by their share in the wholesale trade turnover in all the countries covered by the index or their importance in terms of value of deliveries or sales made. This criterion is systematically applied in many countries because it is easier to obtain the information necessary for its application, since most of that information is derived from the same sources as the basic data used for purposes of weighting, such as, for example, data on sales, shipments or production. However, such data cannot ordinarily be obtained for varieties of articles.

16. A second criterion used in selecting transactions is the degree to which price movements relate to the price pattern of various articles within each category of transaction during a given period. The meeting of this criterion leads to efficiency in the selection process since the closer the relationship between the two factors, the fewer the transactions it will be necessary to calculate. Preference will therefore be given to products whose price pattern closely resembles the price pattern of other products in the same group.

17. In working out indices, it is essential to ensure that the prices recorded in different periods or places relate to articles of the same or equivalent quality. In this connexion, the technique recommended is to make a detailed identification of the articles to which the prices to be indexed relate, as, for example, "bananas - yellow, first quality, ripened." Specifications should include a physical and functional description of the articles in question and a statement of the conditions in which transactions involving them are made. The varieties used may be selected on the criterion of the relationship between price

movements and the pattern of prices within categories of transactions as mentioned above and on the criterion of the number of price changes within a single category during the period covered by the index. Varieties may also be selected on the basis of advice provided by professional organizations and government services.

V. Choice of respondents

18. The problem of knowing how to choose a representative sample of business establishments from which to collect data on wholesale prices is an important one.

Before the commercial establishments are selected, it is essential to draw up a list of all wholesale establishments or outlets with the establishments classified by kind of activity and location and possibly by a number of other appropriate categories such as kind of establishment. They should also be classified by size on the basis of an indicator (total sales, number of persons employed, etc.). This list of enterprises may be drawn up with the help of various kinds of administrative source material, the most important of which may be card file of enterprises, [illegible] results might also be used for this purpose. Establishments will be selected on the basis of their imports as reflected in their share in the value of deliveries made of the products selected. Preference will be given to the largest establishments with an important role in the market or with a heavy impact on prices. [illegible] speaking, such firms are able to supply the most reliable figures in the shortest time possible. If enough resources are available the list may include a certain number of smaller establishments so as to make it more representative in the long term. Finally, account should be taken of the ability of establishments to submit statements of prices and to co-operate actively with the statisticians. In selecting respondents, there is also a need to solicit information from professional organizations of wholesalers and retailers. If possible, at least three enterprises should be selected as respondents for each product and administrative unit, and more than three if a large number of important varieties of the product exists. However, the choice is sometimes limited in that frequently a given article is produced or supplied by one firm only. It should be borne in mind that information can be obtained from commodity exchanges, professional organizations, reliable specialized publications and government offices.

VI. Methods of collecting data

20. Two basic methods may be employed:

(i) A mail inquiry with or without the obligation to reply. This method consists in mailing questionnaires to the respondents who fill them in themselves and mail them back. This is a simple, lowcost method which is preferred by the economically developed countries.

(ii) A survey carried out by conducting interviews or personal visits. This method of inquiring directly of sellers or buyers would be the most appropriate one in Africa. To ensure that the findings are statistically valid, however, there must be no doubt that the majority of the respondents will co-operate. The frequency with which data on prices are collected affects their representative value and depends

on the relative magnitude of the transactions reflected in the various price series and on the amount of change in these prices in time. If the prices fluctuate a great deal, enough data must be collected for a monthly or quarterly index to make it possible to assess the price charges throughout the entire month or quarter. In deciding on the frequency with which price series should be compiled account should also be taken of the cost and difficulty of the operation. In practice, most countries collect data on a monthly or quarterly basis, and a survey is carried out on the transactions made on a given day (the fifteenth of the month or a day in the middle of the quarter).

VII. Wholesale price indices

A. General information

21. Wholesale price indices are intended to measure the changes in wholesale practices which occur over a given period of time. However, in practice, the stage at which prices are observed varies by country and by product. The observation may be made from any point in the distribution process other than the point of retail sale. Thus, the official designation usually assigned to such indices is either "wholesale price index" or "index of production costs". Sometimes prices are referred to as "wholesale prices" because they apply to bulk sales and not because they refer to the prices charged by wholesalers.

B. Coverage of index

22. In theory, only commodities sold wholesale are covered. Wholesale statistics therefore do not cover retail transactions, transactions involving goods such as heavy equipment, vessels and other complex goods. However, in practice, the coverage of indices varies greatly from country to country. In some countries price data for a large number of products are collected, whereas in other countries the indices compiled pertain to only a limited number of products.

23. In Africa, nine countries compile comprehensive wholesale price indices while in three countries (Senegal, the Ivory Coast and Zambia), the only index prepared is one on building materials. Finally, wholesale price indices are usually national in their coverage.

C. Classifications used in indexing

24. The usual method is to work out a number of partial indices based on wholesale prices relating to categories of goods classified according to recommended standard classifications. Thus, goods traded are classified according to the International Standard Classification of all Goods and Services (ICGS) and branches of commercial activity are classified according to the International Standard Industrial Classification of all Economic Activity (ISIC). Other systems of classification, such as national systems, may also be used; however, for a number of years an attempt has been made to compile indices which will make it possible to measure movements in the price of goods in terms of the flow of goods among different sectors of the economy (sectoral approach). In this approach, classification is by kind of industrial activity, economic origin (domestic production, importation) and destination of the goods (intermediate consumption, final consumption, gross fixed capital formation, exports).

D. Method used in calculating indices

25. In most countries, indices are calculated with the help of the Laspeyre formula, i.e., on the basis of weighted arithmetic averages.

26. In the traditional approach, the weighted elements represent the purchase or sales value of the leading products under the system of classification of products adopted. In the sectoral approach, the weighted elements represent the purchase or sales value of the leading products in each economic sector considered.

27. However, in some countries the weighted elements are derived from the value of products consumed on the domestic market. Thus, the sources used in weighting indices are in principle wholesale trade surveys.

28. The frequency with which indices are compiled depends on the rate of flow of goods and on price fluctuations. Thus, indices may be calculated on a monthly, quarterly or yearly basis. As a general rule, the unweighted average of the prices reported by the various firms is used; however, those prices are weighted if they vary significantly because of differences in the conditions of sale or peculiarities in the articles sold.